

REMARKS

The present invention relates to a specific three component curable composition, as defined in claim 1, discussed in more detail below.

In the Office Action dated March 28, 2007, claims 1 - 4 and 7 - 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hasegawa et al (GB 2 303 632 A), and claims 5 and 6 were rejected under 35 U.S.C. § 103(a) based on Hasegawa et al in view of Tsuda et al (U.S. Patent 6,541,552 B1). There were no other rejections.

For the reasons discussed in detail below, the Examiner is respectfully requested to reconsider and withdraw the prior art rejections, and allow pending claims 1 - 20.

Rejection Under 35 U.S.C. §102(b)

The present invention relates to a curable composition which comprises the following components (A), (B) and (C):

Component (A): A polyoxyalkylene polymer containing at least one reactive silyl group at a molecular chain terminus;

Component (B): A polymer composed of acrylic acid alkyl ester monomer units and/or methacrylic acid alkyl ester monomer units containing, on the average, at least one reactive silyl group in each molecule; and

Component (C): An ionic surfactant.

On the other hand, Hasegawa relates to a curable emulsion prepared by copolymerizing the following radical-polymerizable components (a) to (d) in the presence of a pH buffering agent in an aqueous medium:

- (a) an alkoxysilane containing a radical-polymerizable group;
- (b) a vinyl monomer copolymerizable with component (a);
- (c) a polyester or a polyalkylene oxide; and
- (d) a radical polymerizable anionic or cationic surfactant represented by the general

formula: $Z-(AO)_n-Y$ (I).

As mentioned above, the curable composition of the present invention, which is a mixture obtained by mixing and kneading the components (A) - (C), differs from the curable emulsion of Hasegawa, which is a copolymer itself prepared by copolymerizing the radical-polymerizable components (a) - (d). Therefore, the present invention is in fact novel.

It is understood that the Examiner disagrees that all the components (a) - (d) in Hasegawa can copolymerize to form a random copolymer comprising the components (a) - (d). The Examiner also mentions that the component (c) in Hasegawa is not a vinylic monomer but a polymeric material. However, from the recitation of claim 1 in Hasegawa, it is clear that all the components (a) - (d) can be copolymerized to form a random copolymer comprising the components (a) - (d). Furthermore, from the description on page 7, lines 6 - 18 of Hasegawa, it is clear that the component (c) is described as a monomer having a radical-polymerizable group.

In addition, the Examiner indicates that "a polyoxyalkylene polymer containing at least one silyl group at a molecular chain terminus" is inherently possessed in the copolymer of Hasegawa, since the copolymer containing (a) and (b) has "at least one silyl group at a molecular chain terminus" (page 4). However, the polyoxyalkylene polymer itself as the component (A) in the present invention is different from the copolymer containing (a) the alkoxysilane and (b) the vinyl monomer ((meth)acrylic ester monomer) of Hasegawa. Moreover, even if a polyoxyalkylene moiety exists in the copolymer prepared of Hasegawa, it is clear that the copolymer itself of Hasegawa is not the same as the mixture of the components (A) - (C) of the present invention.

Accordingly, the mixture of the present invention differs from the copolymer itself of Hasegawa, and the present invention is novel.

Rejection Under 35 U.S.C. §103(a)

As mentioned above, the curable composition of the present invention differs from the curable emulsion of Hasegawa. In addition, the curable composition of the present invention has excellent effects of inhibiting dust/dirt adhesion and of hardly allowing traces of rain and like stains to be deposited thereon. On the other hand, Hasegawa describes that the curable emulsion has storage stability and can form a film having acid resistance and weather resistance. Thus, the effects of the present invention are also quite different from those of Hasegawa.

Moreover, the Examiner mentions that Tsuda discloses use of a fluorine-containing surfactant. However, Tsuda relates to an aqueous-dispersing composition of synthetic resin, which comprises an aqueous dispersion of synthetic resin and a condensate of tetrafunctional silicate compound (I). Tsuda only describes that by using a fluorine-containing resin as the synthetic resin and a fluorine-containing surfactant as an emulsifier, an aqueous dispersion of the fluorine-containing resin is prepared by emulsion polymerization. Furthermore, Tsuda describes that a property for preventing adherence of stains and weather resistance can be given by using the condensate of tetrafunctional silicate compound (I), which is contained in neither the present invention nor in Hasegawa.

Thus, Tsuda is totally different from the present invention. In addition, Tsuda totally differs from Hasegawa, too. Therefore, one skilled in the art would not find teaching, suggestion, or motivation to combine Hasegawa and Tsuda, nor would such person find any other reason to combine them so as to derive the presently claimed invention. Even though Hasegawa and Tsuda are combined, one skilled in the art would not have thought that the excellent effects of inhibiting adhesion of dust/dirt and rain and like stains could be obtained by the specific constitution of the present invention. Accordingly, the present invention is respectfully submitted to be unobvious from the combination of the references.

In view of the above, reconsideration and allowance of pending claims 1 - 20 of this application are now believed to be in order, and such actions are hereby earnestly solicited.

RESPONSE UNDER 37 C.F.R. § 1.116
Application No.: 10/564,722

Attorney Docket No.: Q92292

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington, D.C. telephone number listed below.

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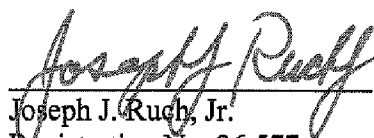
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